

# ANNUAL REPORT FOR 2011



**Greene Street Bridge Mitigation Site**  
**Pitt County**  
**TIP No. B-2225WM**



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## **SUMMARY**

The following report summarizes the monitoring activities that have occurred in the past year at the Greene Street Bridge Mitigation Site. This site was constructed to serve as a wetland mitigation site for the replacement of the existing Greene Street Bridge, as well as the construction of a new bridge to extend Pitt Street over the Tar River in Pitt County.

The wetland restoration area was visually monitored for the 2011 monitoring year. During the onsite agency review for site close-out held on August 26<sup>th</sup>, 2010, it was noted that approximately two-thirds of the vegetation on the site had had been mowed or cut down by hand clearing. It was later determined that this cutting had been done by NCDOT forces unaware that the site was a wetland mitigation site. Since that time the site has been signed identifying it as a mitigation site to prevent further site disturbances.

During the on-site review It was agreed that NCDOT would continue visual vegetation monitoring for at least one additional year; hydrologic monitoring would no longer be required due to the success of the previous five years of monitoring. During the 2011 evaluation, the area that was mowed and hand cleared had hardwood vegetation re-sprouting. The hardwood vegetation included willow oak, sweetgum, sycamore, green ash, black willow, and river birch.

NCDOT recommends that monitoring be discontinued at the Greene Street Bridge Mitigation Site.

## **1.0 INTRODUCTION**

### **1.1 Project Description**

The Greene Street Bridge Mitigation Site consists of approximately 3.1 acres of onsite restoration, enhancement, and preservation of upland levee forest and adjacent bottomlands. The site mitigates for impacts associated with B-2225, which consists of the replacement of the existing Greene Street Bridge, as well as the construction of a new bridge to extend Pitt Street over the Tar River. The purpose of the site is to provide a contiguous bottomland hardwood and cypress swamp system in previously impacted areas.

### **1.2 Purpose**

In order to demonstrate successful mitigation, hydrologic and vegetative monitoring must be conducted for a minimum of five years or until success criteria are satisfied. Success criteria are based on federal guidelines for wetland mitigation and are stipulated in the approved August 1999 Mitigation Plan. The following report details the results of the vegetative monitoring during the 2011 growing season at the Greene Street Bridge Mitigation Site.

### **1.3 Project History**

March 2004	Site Construction
March 2004	Site Planted
March-November 2005	Hydrologic Monitoring (Year 1)
June 2005	Vegetation Monitoring (Year 1)
March-November 2006	Hydrologic Monitoring (Year 2)
August 2006	Vegetation Monitoring (Year 2)
March -November 2007	Hydrologic Monitoring (Year 3)
June 2007	Vegetation Monitoring (Year 3)
July 2008	Vegetation Monitoring (Year 4)
March-November 2008	Hydrologic Monitoring (Year 4)
July 2009	Vegetation Monitoring (Year 5)
March-November 2009	Hydrologic Monitoring (Year 5)
September 2010	Installed signs identifying site
July 2011	Vegetation Monitoring (Year 6)



**Figure 1. Site Location Map**

## **2.0 VEGETATION: GREENE STREET BRIDGE MITIGATION SITE (YEAR 6 MONITORING)**

### **2.1 Success Criteria**

The success criteria state successful plantings will be determined by obtaining at least 260 of the target trees per acre after five years. Also, no tree species should dominate more than 20% of the total density. If desired vegetation has not been established, NCDOT will notify the appropriate agencies and will implement corrective measures.

### **2.2 Description of Species**

The following tree species were planted in the Wetland Restoration Area:

*Taxodium distichum*, Bald cypress

*Quercus phellos*, Willow Oak

*Nyssa sylvatica* var. *biflora*, Swamp Blackgum

*Platanus occidentalis*, Sycamore

*Betula nigra*, River Birch

*Quercus michauxii*, Swamp Chestnut Oak

### **2.3 Results of Vegetation Monitoring**

The wetland restoration area was visually monitored for the 2011 monitoring year. During the onsite agency review for site close-out held on August 26<sup>th</sup>, 2010, it was noted that approximately two-thirds of the vegetation on the site had had been mowed or cut down by hand clearing. It was later determined that this cutting had been done by NCDOT forces unaware that the site was a wetland mitigation site. Since that time the site has been signed identifying it as a mitigation site to prevent further site disturbances.

It was agreed that DOT would continue visual vegetation monitoring for at least one additional year. During the 2011 evaluation, the area that was mowed and hand cleared had hardwood vegetation re-sprouting. The hardwood vegetation included willow oak, sweetgum, sycamore, green ash, black willow, and river birch.

### **2.4 Conclusions**

The 2011 vegetation monitoring of the site noted that the planted hardwood vegetation has continued to re-vegetate throughout the cut area.

NCDOT proposes to discontinue all monitoring activities at the Greene Street Bridge Mitigation Site.

## **APPENDIX B**

### **SITE PHOTOS, PHOTO LOCATIONS, AND PLOT LOCATIONS MAP**



# Greene Street Bridge



Photo 1



Photo 2



Photo 3



Photo 4



Additional photo of cut area  
July 2011



Additional photo of cut area



# Greene Street Bridge



Additional photo of cut area



Overview photo of cut area



Overview photo of the site  
July 2011

GREENE STREET BRIDGE

1

2

3

4


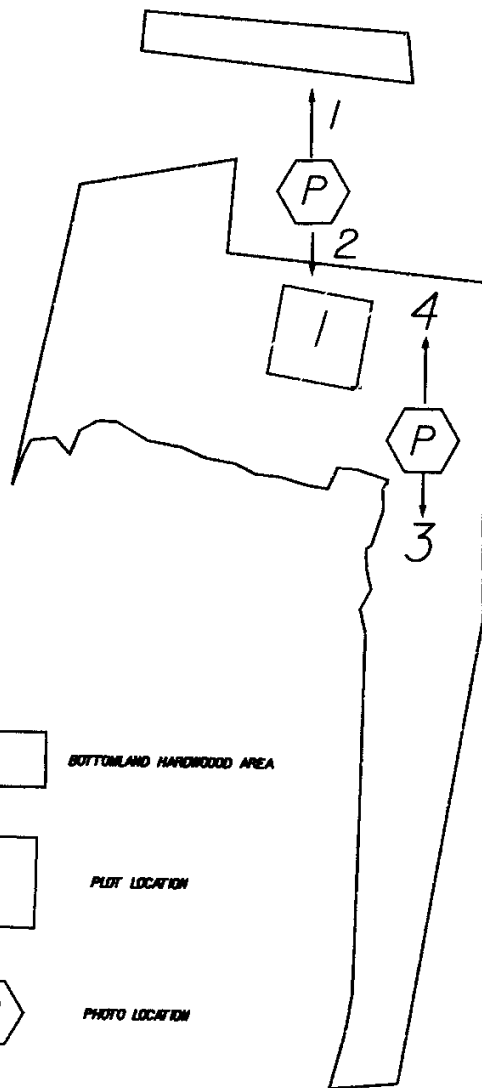
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BOTTOMLAND HARDWOOD AREA

PLOT LOCATION

PHOTO LOCATION



**PHOTO LOCATION**